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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/563,969

03/01/2006

Thomas Ficker

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EXAMINER

OMGBA, ESSAMA

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

06/08/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/563,969 | <b>Applicant(s)</b><br>FICKER ET AL. |  |
|                              | <b>Examiner</b><br>Essama Omgba      | <b>Art Unit</b><br>3726              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14, 16-20 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14, 16-20 and 22-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 14, 16-20 and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (US 2005/0006899) in view of Turner (US Patent 4,881,679) or Nicholson (US Patent 831,887).

With regards to claims 14, 29 and 30, Lewis discloses a cold rolling method for producing an annular composite workpiece wherein a first hollow cylindrical workpiece 12b is inserted into a second hollow cylindrical workpiece 12a, the workpieces being made of different materials, and axial roll forming a composite workpiece of the first and second hollow cylindrical workpieces, the axial roll forming being performed by pressing the first and second hollow cylindrical workpieces against each other between two diametrically opposed outer roll forming tools 17, see paragraphs [0042]-[0044]. Lewis does not disclose using an inner rolling arbor or an inner roll forming tool. However Turner teaches roll forming a clad tubing by inserting a mandrel in a subassembly made of two hollow cylindrical workpieces 10 and 14, and roll forming a clad tubing using a bank of opposing rolls to metallurgically bond the workpieces, wherein the workpieces 10 and 14 are deformed radially and axially, see column 6, lines 33-45. Likewise Nicholson teaches manufacturing compound tubes by telescoping one tube within another one and rolling it over a mandrel with opposed rollers to reduce its thickness and elongate it, see page 1, lines 73-89. Therefore it would have been obvious to one of ordinary skill in the

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art at the time the invention was made, to have used an inner rolling arbor in axial roll forming the annular composite workpiece of Lewis, in light of the teachings of Turner or Nicholson, in order to achieve an excellent metallic bond between the workpieces and prevent the tubes from collapsing during the rolling operation. Applicant should note that the workpieces of Lewis/Turner/Nicholson are inserted one into the other with some play between the workpieces. Further the method of Lewis/Turner/Nicholson would work for workpieces that are press-fit one into the other.

Regarding claims 16-18, Applicant should note that the method of Lewis/Turner/Nicholson could be used for rings or pipes, the rings or pipes being either loosely inserted into each other or having radial play relative to one another such that they can barely be inserted by hand.

Regarding claims 19 and 20, see column 4, lines 39-68 of Turner for example. Regarding the recitation of the layer being an aluminum layer, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have selected whatever material was expedient in the method of Lewis/Turner/Nicholson, since it has been held to be within the general skill level of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See also *Ballas Liquidating Co. v. Allied industries of Kansas, Inc.* (DC Kans) 205 USPQ 331.

Regarding claims 22-28, Applicant should note that Official Notice is taken in that such composite workpieces are conventional in the art and such composite workpieces could be made by the method of Lewis/Turner/Nicholson.

***Response to Arguments***

3. Applicant's arguments with respect to claims 14, 16-20 and 22-30 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Essama Omgba/  
Primary Examiner, Art Unit 3726

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June 5, 2010